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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/236,897	01/26/1999	AKIHIRO KOMATSU	Q53086	9842

7590 08/26/2003

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 200373202

EXAMINER
CROSS, LATOYA I

ART UNIT	PAPER NUMBER
1743	

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/236,897	KOMATSU, AKIHIRO	
	Examiner	Art Unit	
	LaToya I. Cross	1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-6 and 8-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-6 and 8-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *21,25* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This Office Action is in response to Applicants' amendment filed on June 12, 2003 and entered as Paper No. 22. Claims 1, 2, 4-6 and 8-20 are pending.

Withdrawal of Rejections from Previous Office Action

- The rejection of claims 1, 2, 4-6 and 8-20 under 35 USC 103(a) over Smith et al in view of Richards et al is withdrawn in view of Applicants' submission of a certified translation of Japanese priority document 14467/1998 which perfects Applicants' claim to benefit of the January 27, 1998 priority date. Thus, the Richards et al reference is not available as prior art against Applicants.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 2, 5, 6 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,296,069 to Smith et al in view of US Patent 6,180,061 to Bogen et al and US Patent 5,059,393 to Quenin et al.

Smith et al '069 disclose an apparatus for processing analysis slides in a chemical analyzer. The apparatus comprises a first meter device (18) for metering (spotting) sample

fluid from sample cups on a sample tray onto an analysis slide of the colorimetric type. A second meter device is provided to deposit sample and reference fluid onto analysis slides of the potentiometer type (col. 3, lines 40-45). Incubators (22, 24) are provided to function with analysis means (23, 25) (equivalent to Applicants' claimed concentration measuring means). The analysis means measure a change in the analysis slides as a result of the fluid being deposited thereon (col. 4, lines 40-45). Results from the analysis means (25) may be transmitted to a computer for appropriate calculations of concentration for various samples (col. 7, lines 53-58). Control circuits are provided which include thermistors for controlling the temperature of various heating elements (col. 4, lines 28-37). The thermistors are equivalent to Applicants' claimed temperature control means. Also disclosed are housings (14, 16) where analysis slides are supplied and moved between the incubator (24) and analysis means (25), via a slide transfer mechanism (128). The housings (14,16) are equivalent to Applicants' claimed chemical analysis element supply section, recited in claims 2 and 6. The slide transfer mechanism (128) is equivalent to Applicants' claimed conveyer means recited in claims 2 and 6. The position of the analysis slide is detected by means of an optical sensor (col. 6, lines 33-36). Also disclosed by Smith et al is the additional use of an ion activity measuring means comprising electrodes selective to ion activity (col. 3, lines 12-15), as recited in claims 1, 5, 9 and 16.

Smith et al fail to teach 1) a single incubator for receiving and holding all the analysis elements and maintaining a constant temperature for the analysis slides, and wherein the incubator may simultaneously maintain different temperatures for different slides and 2) a detector comprising a bar code reader for detection of the position of the analysis slides by way of a bar code on the slides.

With respect to the single incubator, Bogen et al teach an apparatus for stain processing analysis slides. The apparatus of Bogen et al is similar to that of Smith et al in that it functions as an automatic device for preparing slides for analysis. The device of Bogen et al comprises a slide rotor having multiple slide frames capable of holding slides in different slide positions, i.e. for receiving and storing multiple analysis slides, as recited in claims 10, 11, 13, 14, 17 and 18. See col. 5, lines 56-61. Each slide frame has a slide frame base having heating areas under each of the slide positions. The heating elements are formed into the slide frame base. Because each slide has its own heating element, the slides can be maintained at different temperatures simultaneously, as recited in claims 11, 12, 14, 15, 18 and 19. The slide rotor along with the individualized slide frames and heating elements constitute a single incubator for multiple slides, as recited in claims 1, 5, 9 and 16. See col. 5, line 61 – col. 6, line 21. It would have been obvious to one of ordinary skill in the art to modify the two-incubator system of Smith et al and use a single incubator for multiple slides (as disclosed by Bogen et al) because such would provide more efficient operation where multiple slides need to be analyzed. The incubator described in Smith et al allows only two slides to be heated, whereas the incubator of Bogen et al allows multiple slides to heated and also allows individualized heating, so that temperature conditions of one slide will not affect the temperature conditions of another. Therefore, multiple slide processing may take place even where each slide is being processed differently.

With respect to a detector comprising a bar code reader, as recited in claims 1, 5, 9, 16 and 20, Smith et al teaches using an optical source to detect the position of the slides (col. 6, lines 33-36 of Smith et al). Quenin et al teach an analyzer similar to that of Smith et al and Bogen et al where bar codes are disposed on each analysis slide. A bar code reader is provided to determine the kind of slide moving toward the dispensing station and also determine the

position of the slide (col. 4). It would have been obvious to one of ordinary skill in the art to modify Smith et al by using a bar code to determine the position of the slides instead of an optical source, because in addition to determining the position of the slides, other useful information about the slide, such as type, can be determined when bar codes are used. Using bar codes will also provide a manner of keeping track, by way of computer data, of the analyses taking place in the automatic system.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103, in view of the teachings of Smith et al, Bogen et al and Quenin et al.

4. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al, Bogen et al and Quènin et al as applied to claims 1, 2, 5, 6 and 9-20 above, and further in view of US Patent 5,814,277 to Bell et al.

With respect to claims 4 and 8, neither Smith et al, Bogen et al nor Quenin et al teach a diluting unit in the analysis systems.

Bell et al teach an automatic chemical analyzer comprising sample and reagent containers (22, 24). Aliquots of sample and reagent are drawn up from the chambers and dispensed into test cells. Bell et al disclose that the samples may be diluted automatically by dispensing buffer solution from reservoir (52) into the test cells. The automatic dilution of sample is disclosed as being advantageous when the sample concentration is too high or when limited amounts of sample are available for testing. Automated dilution also eliminates the potential for user error in sample dilution. See col. 9, lines 10-18.

It would have been obvious to one of ordinary skill in the art to use a diluting unit in the system of Smith et al to allow analysis even where the sample size is small. Also, it would have been obvious to the ordinarily-skilled artisan to use an automatic dilution system to reduce user error and increase the efficiency of the operation.

Therefore, for the reasons set forth above, Applicant's claimed invention is deemed to be obvious, within the meaning of 35 USC 103(a) in view of the teachings of Smith et al, Bogen et al and Quenin et al and further in view of Bell et al.

Response to Arguments

5. Applicant's arguments with respect to claims 1, 2, 4-6 and 8-20 have been considered but are moot in view of the new ground(s) of rejection. This Office Action is Non-Final to allow Applicants an opportunity to respond to the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 703-305-7360. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 703-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

LaToya I. Cross
Examiner
Art Unit 1743

LaToya Cross